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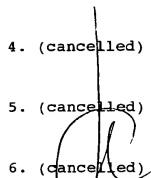
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CLAIMS

1. (amended) A sliding member comprising a substrate and a hard coating formed on said substrate, wherein said hard coating comprises a nitride-based material containing titanium nitride and Cr, and having a face-centered cubic crystalline structure with a lattice constant ranging from 0.414 to 0.423 nm in a crystal of said nitride-based material.

10 2. (cancelled)

3. (amended) A sliding member comprising a substrate and a hard coating formed on said substrate, wherein said hard coating comprises a nitride-based material containing titanium nitride and B, and having a face-centered cubic crystalline structure comprising crystallites of an average size of not more than 9 nm.



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- 8. (cancelled)
- 9. (cancelled)
- a hard coating formed on said substrate, wherein said hard coating comprises a nitride-based material containing titanium nitride and at least one element selected from the group consisting of Zr and Hf, and having a face-centered cubic crystalline structure with a lattice constant ranging from 0.414 to 0.423 nm in a crystal of said nitride-based material.
- 11. (added) A sliding member according to any of claims
 1, 3 and 10, wherein said nitride-based material has a chemical
 composition defined by a formula, excepting inevitable
 impurities:

Ti₍₁₀₀₋₎Me hitride compound where Me represents one element selected from the group consisting of Cr, Zr, Hf and B, and x is in a range given by a relation:

2 atomic $% \le x \le 30$ atomic %.

12. (added) A method for making a sliding member according to any of claims 1, 3, 10 and 11, comprising the steps of: forming a hard coating on said substrate by simultaneously depositing in a vacuum Ti and at least one element selected from the group consisting of Cr, Zr, Hf and B on said substrate while irradiating said substrate with ion beams containing

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substantially nitrogen ions.

13. (added) A sliding mechanism comprising a combination of a movable member and a static member, wherein either said movable member or said static member is made of a sliding member according to any of claims 1, 3, 10 and 11, or made by a method according to claim 12, and the remaining member is made of a material containing carbon.

14. (added) A sliding mechanism according to claim 13, wherein said material containing carbon is a material containing substantially carbon, a material infiltrated with carbon or a thin film containing carbon.

15 (Added) A sliding member according to any of claims
1, 3 and 10, wherein said substrate is a metal material.

16 (added) A method according to claim 12, wherein said substrate is a metal material.

17 (added) A sliding mechanism according to claim 13 or 14, wherein said substrate is a metal material.

18. (added) A dressing tool comprising a sliding member according to any of claims 1, 3 and 10, or comprising a sliding member made by a method according to claim 12.

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